



TECHNICAL BULLETIN #3111 – INSULCAST 3707 F ADJUSTABLE FLEXIBILITY CASTING EPOXY

Revised: 05/2018

PRODUCT DESCRIPTION

INSULCAST 3707 F is a low viscosity filled epoxy casting compound.

PROPERTIES UNCURED

	PART A	PART B	
COLOR, VISUAL	Black	Amber	-
VISCOSITY, cps	13,000	8,000	ASTM D 2393
SPECIFIC GRAVITY	1.62	0.96	-
SPECIFIC GRAVITY MIXED	1.47		ASTM D 2393
MIXED VISCOSITY, cps	8-13,000		-
MIX RATIO (RIGID) (by wt.)	100:30		-
MIX RATIO, (SEMI-RIGID) (by wt.)	100:75		-
MIX RATIO, (FLEXIBLE) (by wt.)	100:100		-
POT LIFE 150 gr. mass @ 25°C, hours	2		-
SHELF LIFE @ 25°C, months	12		-

PROPERTIES CURED

PHYSICAL		
HARDNESS, DUROMETER (Shore D)	60	ASTM D 2240
TENSILE LAP SHEAR, AL-AL, psi	2400	-
FLEXURAL STRENGTH, psi	8000	-
IZOD IMPACT, ft-lbs/inch of notch	4.0	-
SERVICE TEMPERATURE, °C	-54 to +162	-

ELECTRICAL

DIELECTRIC STRENGTH, volts/mil	425	ASTM D 149
DIELECTRIC CONSTANT, 1 KHz	3.5	ASTM D 150
DISSIPATION FACTOR, 1 KHz	0.03	ASTM D 150
VOLUME RESISTIVITY, ohm-cm	1x10 ⁻¹⁴	ASTM D 257

USE INSTRUCTIONS

1. Premix contents of each container before use to insure uniformity. Some light settling may occur, but it will be soft and easily reincorporated.
2. Measure out required amount of each component and mix together thoroughly. Be careful to scrape sides and bottom of container to incorporate all unmixed material, or serious loss of physical and electrical properties will result.
3. De-air (if necessary) at 29 in. Hg for 10 minutes.
4. Pour into cavity or mold.
5. Recover both containers immediately after each use to prevent contamination.

CURE SCHEDULE

Allow to cure 16-24 hours at room temperature (72°F).
To accelerate cure, allow 2 hours at room temperature (72°F), then 130°F for 2 hours.

STORAGE REQUIREMENTS

This product has a tendency to settle upon shipment or storage. The product should be re-mixed well prior to use. Store material in a cool dry place.

IMPORTANT:

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HEALTH CAUTION:

Avoid breathing possible fumes, mists and vapors which can cause severe respiratory damage. Use of NIOSH approved breathing apparatus is required for more than minimal exposure. Always work in areas with adequate ventilation to allow dissipation of polyamine and other chemical fumes, and where applicable, solvent fumes. Use of goggles, protective garments, rubber gloves, protective cream is required. If material gets into eyes, flush thoroughly with clean water for twenty (20) minutes; then seek medical treatment. Avoid skin contact. Material can cause contact dermatitis. Always wash exposed areas immediately, using warm water and soap, followed by rinsing with clean water. Observe all safety precautions. It is important when using solvent based materials or solvents to keep away from open flame or ignition source.

PLEASE REFER TO MATERIAL SAFETY DATA SHEET FOR FURTHER FIRST AID INFORMATION. FOR CHEMICAL EMERGENCY, CALL CHEMTREC (DAY OR NIGHT) 800 424-9300.